



# County of San Luis Obispo—Department of Public Works

## County Service Area 16—Shandon

### 2011 Water Quality Report

March 2012

**TO OUR CUSTOMERS:** The County of San Luis Obispo is pleased to present this annual report describing the quality of your drinking water. We sincerely hope this report gives you the information you seek and have a right to know. *Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.*

## SOURCES OF DRINKING WATER

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

**Contaminants that may be present in source water include:**

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- *Radioactive contaminants* which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.



The Shandon water tank helps maintain water pressure and a steady supply of water in the distribution system. (Picture by Mike Garcia)

## YOUR WATER SUPPLY

Your water comes from two groundwater wells, located in Shandon, which tap into the Paso Robles Groundwater basin. Your water is cleaned through a natural filtration process as it trickles down through the ground. During this process, it may also pick up minerals or contaminants found in the soil, either natural or man-made. Your water is normally very clean and is simply disinfected with chlorine to help minimize the potential for viral and bacterial contamination.

Source water assessments were completed for each well (Well #4 and Well #5) in 2002. The wells are considered to be most vulnerable to the following activities: grazing, utility stations-maintenance areas, historic gas stations, and high density septic systems. Other than low levels of nitrate, no contaminants associated with these activities have been detected in the water. A copy of the assessment is available from Kurt Souza, Regional Engineer Santa Barbara District, California Department of Public Health, at (805) 566-1326 or from John Beaton, Water Quality Manager, County of San Luis Obispo Department of Public Works, at (805) 781-5111.

A resource capacity study has been conducted on the Paso Robles Groundwater Basin. Copies can be found online at <http://www.slocounty.ca.gov/planning> and in the Shandon Community Library.

### Water Statistics

Year	Total Production, million gallons	Average Daily Demand, gallons
2008	52.1	142,000
2009	50.4	138,000
2010	45.4	124,000
2011	43.4	119,000

These tables list all of the drinking water contaminants that were detected in your water in 2011, unless otherwise noted. The presence of these contaminants in water does not necessarily indicate that the water poses a health risk. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Thus, some of our data may be more than one year old, but remains representative. For questions about this data, contact John Beaton, Water Quality Manager, at (805) 781-5111 or email JBeaton@co.slo.ca.us.

REGULATED CONTAMINANTS WITH PRIMARY MCLs, MRDLs, TTs or NLs								
Contaminant	Where sampled	When sampled	Reporting units	MCL or [MRDL]	PHG (MCLG) or [MRDLG]	Range detected	Average detected	Potential Source of Contamination
<b>MICROBIOLOGICAL CONTAMINANTS</b>								
Total Coliform Bacteria	Distribution	2011	Present or absent	> 1 positive sample per month	(0)	----	ND	Naturally present in the environment
Heterotrophic Bacteria	Distribution	2011	CFU/mL	TT = < 500	----	0 - 40	3	Naturally present in the environment
<b>INORGANIC CONTAMINANTS</b>								
Arsenic	Wells	5/3/2010	ppb	10	0.004	2.4—2.6	2.5	Erosion of natural deposits
Barium	Wells	5/3/2010	ppm	1	2	0.17—0.19	0.18	Erosion of natural deposits
Fluoride	Wells	5/4/2011	ppm	2.0	1	0.125 - 0.307	0.220	Erosion of natural deposits
Nitrate as NO3	Wells	2011	ppm	45	45	10.2 - 21.0	16.0	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
<b>RADIOACTIVE CONTAMINANTS</b>								
Gross Alpha Particle Activity	Wells	2004, 2010	pCi/L	15	----	ND—4.42	2.5	Erosion of natural deposits
Radium 228	Wells	2004	pCi/L	5	----	ND—1.22	ND	Erosion of natural deposits
<b>DISINFECTANT RESIDUALS and DISINFECTION BYPRODUCTS</b>								
Bromoform	Distribution	2011	ppb	----	----	----	1.2	By-product of drinking water disinfection
Chlorine	Distribution	2011	ppm	[4.0 as Cl <sub>2</sub> ]	[4 as Cl <sub>2</sub> ]	1.12 - 1.85	1.41	Drinking water disinfectant added for treatment.
Dibromochloromethane	Distribution	2011	ppb	----	----	----	1.0	By-product of drinking water disinfection
Total Trihalomethanes	Distribution	2011	ppb	80	----	----	2.2	By-product of drinking water disinfection
<b>CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD (AESTHETICS)</b>								
Chloride	Wells	2011	ppm	500	----	63.6—94.1	78.8	Runoff/leaching from natural deposits
Color	Distribution	2011	CU	15	----	ND - 2	1	Naturally occurring organic materials
Odor – Threshold	Distribution	2011	TON	3	----	1.0 - 3.0	1.5	Naturally occurring organic materials
Specific Conductance	Wells	2011	µS/cm	1600	----	603 - 781	670	Runoff/leaching from natural deposits
Turbidity	Distribution	2011	NTU	5	----	0.04 - 0.32	0.12	Soil runoff
Total Dissolved Solids	Wells	2011	ppm	1000	----	380—470	420	Runoff/leaching from natural deposits
Sulfate	Wells	2011	ppm	500	----	75.8 - 78.1	77	Runoff/leaching from natural deposits
<b>UNREGULATED CONTAMINANTS</b>								
Total Alkalinity as CaCO <sub>3</sub>	Wells	2011	ppm	NS	----	100—110	100	Runoff/leaching from natural deposits; seawater influence.
Calcium	Wells	2011	ppm	NS	----	67 - 78	72	Runoff/leaching from natural deposits.
Total Hardness	Wells	2011	ppm	NS	----	190—230	210	Generally found in ground and surface water; seawater influence.
Magnesium	Wells	2011	ppm	NS	----	5 - 10	8	Runoff/leaching from natural deposits; seawater influence.
pH	Wells	2011	----	NS	----	7.84	7.84	Runoff/leaching from natural deposits; seawater influence.
Sodium	Wells	2011	ppm	NS	----	40 - 46	43	Runoff/leaching from natural deposits; seawater influence.

## COPPER IN SHANDON HOMES

Contaminant	When sampled	Reporting units	NL	MCLG	Number of Samples Collected	90th Percentile Level Detected	Number of Sites found above the NL	Potential Source of Contamination
Copper	2011	ppb	1300	300	12	120	0	Internal corrosion of household water plumbing systems

## KEY TERMS and ABBREVIATIONS

**CU** - color units

**CFU/mL**—number of colony forming units per milliliter of sample

**MCL (Maximum Contaminant Level)** – The highest level of a contaminant that is allowed in drinking water.

**MCLG (Maximum Contaminant Level Goal) and PHG (Public Health Goal)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the United States Environmental Protection Agency and PHGs are set by the California Environmental Protection Agency.

**MRDL (Maximum Residual Disinfectant Level)** - The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

**MRDLG (Maximum Residual Disinfectant Level Goal)** - The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

**ND (Not Detected)** - Contaminant is not detectable at testing limit.

**NL (Notification)** – The concentration of a contaminant that, if exceeded, triggers treatment or other requirement which a water system must follow.

**NS (No Standard)** - Contaminant for which there is no established MCL.

**NTU** - Nephelometric Turbidity Unit

**pCi/L** - picoCuries per liter (a measure of radioactivity)

**ppb** - parts per billion, or micrograms per liter (µg/L)

**ppm** - parts per million, or milligrams per liter (mg/L)

**Primary Drinking Water Standards** – MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards** – MCLs for contaminants to protect the taste, odor, or appearance of the drinking water.

**TON** - Threshold Odor Number

**TT (Treatment Technique)** – A required process intended to reduce the level of a contaminant in drinking water.

**µS/cm**— microSiemens per centimeter (1 S = 1 ohm<sup>-1</sup>)

A measure of electrical conductance.

## DRINKING WATER AND HEALTH RISKS

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. **The presence of contaminants does not necessarily indicate that water poses a health risk.** More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDs or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water typically comes from materials and components associated with service lines and home plumbing.

The County of San Luis Obispo is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-425-4791) or at <http://www.epa.gov/safewater/lead>.

## OPERATIONS

The Shandon water system is assigned one primary operator who, like all operators who work for the County, is certified by the California Department of Public Health (CDPH). Our operators are knowledgeable professionals who have many years of experience. They are dedicated to maintaining an excellent water system and providing you with the best quality water possible.

Operators conduct weekly inspections of the wells, tank, and distribution system to ensure a safe and reliable water supply. In addition, the CDPH routinely inspects the facilities, operating procedures, and water quality monitoring records to verify compliance with state and federal regulatory requirements.

## SHANDON NEWS

On January 25, 2011, the County Board of Supervisors directed staff, with the Shandon Advisory Council's support, to proceed with connecting Shandon to the State Water system. This will improve water supply reliability for the community and benefit the groundwater basin overall. County staff will be pursuing grants to help pay for these improvements if they are available. Staff will continue to monitor the status of the Shandon Community Plan and any infrastructure improvements included within it.



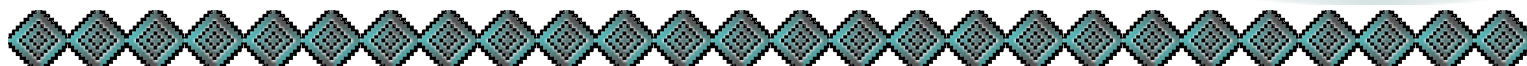
## Water Conservation Tips for Consumers

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers – a 5 minutes shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair or shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!



Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.



### Internet

USEPA Office of Ground Water and Drinking Water  
<http://water.epa.gov/drink/index.cfm>  
California Department of Public Health  
[www.cdph.ca.gov/programs/Pages/DDWEM.aspx](http://www.cdph.ca.gov/programs/Pages/DDWEM.aspx)  
San Luis Obispo County Public Works Department  
[www.slocountywater.org](http://www.slocountywater.org)

### Telephone

John Beaton, SLO County Water Quality Manager, 805-781-5111.

### Mailing Address

County of San Luis Obispo  
Department of Public Works  
County Government Center, Room 207  
San Luis Obispo, CA 93408

**We're on the Web! [www.slocountywater.org](http://www.slocountywater.org)**

## COMMUNITY PARTICIPATION

The governing body for Shandon is the San Luis Obispo County Board of Supervisors. The Board meets every Tuesday (except the 5th Tuesday in a month) at 9:00 a.m. in the new Government Center, 1055 Monterey Street, San Luis Obispo. Agendas for Board of Supervisors meetings are posted in some County libraries, the County Government Center, and on the County's website at [www.slocounty.ca.gov](http://www.slocounty.ca.gov).

The Shandon Community Advisory Council meets the first Wednesday of every month at 7:00 pm in the Clubhouse in the Crawford W. Clarke Park. You can contact the advisory council by email at [shandoncouncil@yahoo.com](mailto:shandoncouncil@yahoo.com), or at P.O. Box 92, Shandon, 93461. Advisory council recommendations are considered by the Board of Supervisors when they make decisions that affect Shandon, including the water system.

The North County Water Forum/Groundwater Advisory Committee meets periodically to discuss water issues related to the Paso Robles Groundwater basin, which is the source for Shandon's drinking water. Current topics include the implementation of the Groundwater Management Plan and Resource Capacity Study for the basin. All interested parties are invited to attend. To receive notification for upcoming meetings, please contact Courtney Howard, SLO County Water Resources Engineer, at (805) 781-1016, or via email ([choward@co.slo.ca.us](mailto:choward@co.slo.ca.us)).

